

Andrews University
Digital Commons @ Andrews University

Honors Theses

Undergraduate Research

2015

Changing Attitudes Towards Sexual Orientation and the Effect of Documentary Film

Michael Jon VanderWaal

This research is a product of the graduate program in [Behavioral Sciences](#) at Andrews University. [Find out more](#) about the program.

Follow this and additional works at: <http://digitalcommons.andrews.edu/honors>

Recommended Citation

VanderWaal, Michael Jon, "Changing Attitudes Towards Sexual Orientation and the Effect of Documentary Film" (2015). *Honors Theses*. Paper 117.

This Honors Thesis is brought to you for free and open access by the Undergraduate Research at Digital Commons @ Andrews University. It has been accepted for inclusion in Honors Theses by an authorized administrator of Digital Commons @ Andrews University. For more information, please contact trobtsn@andrews.edu.



Seek Knowledge. Affirm Faith. Change the World.

Thank you for your interest in the

**Andrews University Digital Library
of Dissertations and Theses.**

*Please honor the copyright of this document by
not duplicating or distributing additional copies
in any form without the author's express written
permission. Thanks for your cooperation.*

J. N. Andrews Honors Program
Andrews University

HONS 497
Honors Thesis

Changing Attitudes Towards Sexual Orientation and the Effect of Documentary Film

Michael Jon VanderWaal

March 30, 2015

Advisor: Harvey Burnett

Department: Behavioral Sciences

Acknowledgments: Special thanks to Harvey Burnett, Curtis VanderWaal, Meredith Jones Grey for editing this work. Also a special thank you to Daneen Akers and Stephen Eyer for a copy of their film and to Aubyn Fulton for a copy of his paper.

Abstract

Attitudes towards LGBT people are shifting rapidly, with over half (51%) of the US population now favoring same-sex marriage. LGBT issues are also being hotly debated in the Seventh-day Adventist (SDA) church. The purpose of this research is to examine how the film, *Seventh-Gay Adventist* (SGA) influences SDA college students' attitudes regarding homosexuality. My study compares attitude scores of students ($N=46$) using an experimental design with random assignment. Both the experimental group and the control group completed a commonly used Homosexuality Attitude Scale and modified version of Fulton's Adventists and LGB's survey at pretest and posttest. Results show that the film had no significant effect on students' overall attitudes. However, a significant difference in attitude change was found on one individual item: a homosexual's ability to become heterosexual. This suggested that after watching the film, subjects were more likely to think that lesbian and gay individuals cannot change their sexual orientation.

Introduction

Attitude is an important concept in the field of psychology. In fact, in the 1930s, attitude was considered “the most indispensable term in social psychology (Allport, 1935) and it continues to be one of the most studied concepts in the field (Maio et al., 2006; Plotnik & Kouyoumdjian, 2011, p. 588). Most attitude theories contain three components: a *cognitive component*, an *affective component*, and a *behavioral component* (Huskinson & Haddock, 2006; Plotnik & Kouyoumdjian, 2011). The *cognitive component* is both thoughts and beliefs involved in evaluating some object, person or idea that can be automatically triggered, without much conscious thought. Emotional feelings or beliefs, or the *affective component*, can be the weak or strong, positive or negative feelings that have an effect on an individual’s attitudes. The *behavioral component*, either performing or not performing some behavior, is the expressed outcome of attitude and is the final piece in the attitude trifecta.

If one is interested in changing an individual’s attitude, there are two main avenues according to social psychology: *central route* or *peripheral route* (Plotnik & Kouyoumdjian, 2011, p. 590). The *central route* for persuasion presents information with strong arguments, analysis, facts and logic. This route seems to produce more enduring results. The *peripheral route* emphasizes emotional appeal, focuses on personal traits, and generates positive feelings. Generally this approach tends to be more energetic, enthusiastic, and produces more transient effects (Plotnik & Kouyoumdjian, 2011). Good arguments should make strong appeals to both avenues of persuasion in order to make a convincing case that produces observable change.

American attitudes towards lesbian, gay and bisexual (LGB)¹ populations are changing rapidly. According to every major polling agency (except Fox News,) U.S. support for same-sex marriage is over 50% (Jones et al., 2014). The Pew Research Center reports that this change is among the largest changes in opinion on any policy issue over the past decade (Pew, 2013). In fact, 14% of Americans say they have changed their minds and are now in favor of gay marriage. The changes in society are occurring at a rapid rate, especially among the Millennial generation (Pew, 2013). This shift in public support could be, in large part, due to media exposure (Calzo & Ward, 2009; Crooks & Baur, 2014).

According to the Public Religion Research Institute (Jones et al., 2014), Millennials are most in favor (69%) of same-sex marriage whereas the Silent Generation is most opposed (37% in favor). This generational trend holds true even among socially conservative groups like Republicans and white evangelical Protestants (see Figure 1). For example, white evangelical Protestant Millennials are more than twice as likely to support same-sex marriage than the oldest generation (43% vs. 19%; Jones et al., 2014). Other research suggests that younger people and women (Johnson & Alford-Keating, 1997; Finlay and Walther, 2000) also report more favorable attitudes.

Today, several major religious groups are in favor of same-sex marriage compared to 2003 when all major religious groups were opposed to same-sex marriage (Jones et al., 2014). Currently, 62% of white mainline Protestants, 58% of white Catholics and 56% of Hispanic Catholics are in favor of same-sex marriage. Conversely, 69% of white evangelical Protestants

¹ LGBT is the most commonly accepted terminology as the identifier for this population. This paper however sometimes uses the term LGB because it refers to a survey by Fulton et al. (2013) which only addresses only the LGB population. The Adventist subculture will most commonly refer to this group as homosexuals and does not often make any distinction between various orientations.

and 59% of black Protestants oppose same-sex marriage (Jones et al., 2014). Millennials in every religious group are more in favor of same-sex marriage than older generations.

Calzo and Ward (2009) suggest that mass media exposure may cause a mainstreaming effect. Increased media exposure may draw groups with different attitudes towards a more similar viewpoint on homosexuality. Previous research indicates that exposure to gay men and women vis-à-vis documentary film may impact a person's views of homosexuality, prompting more favorable attitudes towards LGB individuals (Riggle et al., 1996; Mazur & Emmers-Sommers, 2002; Cooley and Burkholder, 2011). Other advocacy documentaries about different topics show similar results (Penn et al., 2003; Jomini Stroud, 2007).

This societal attitude change is likely to have an effect on the subculture of Seventh-Day Adventists.² However, at this point there is no way to know the impact of these larger societal trends because monitoring of Adventist attitudes at this point is quite minimal and there are no known longitudinal studies measuring Adventist attitudes about homosexuality. Many within the church see the issues surrounding homosexuality to be important but also potentially divisive.

The official stance of Adventist Church on homosexuality is “that sexual intimacy belongs only within the marital relationship of a man and a woman” (Seventh-day Adventist Church, 2012). The church has also modified its public stance stating “Homosexuality is a manifestation of the disturbance [rather than “disorder” as stated in a previous 1999 version] and brokenness in human inclinations and relations caused by the entrance of sin into the world” (Garcia, 2012). Both of these statements indicate the officially held Adventist Church position

² Although Adventists have some unique religious practices (strict diet, attending church on Saturday) they are most similar in the Behavioral science literature to conservative evangelical Christian denominations who interpret the Bible more literally.

has changed slightly but does not say anything about what Adventist church members actually think.

Very few published studies have examined Seventh-day Adventist (SDA) attitudes towards same-sex marriage or towards lesbian, gay, or bisexual people in general. Aubyn Fulton et al. (2013) completed the only known publicly accessible survey measuring Adventist attitudes towards homosexuality in the field of the behavioral sciences. According to Fulton et al. (2013), their sample of Adventist church members as a whole hold negative attitudes towards LGB populations, with 88% believing homosexuality is a sin. The survey reports that 86% of Adventists say that homosexuality is condemned by the Bible, but 94% affirmed that they would welcome a lesbian or gay person to their church and 52% would have no problem baptizing a gay or lesbian couple who are living together. However, they found around half believed that homosexuality is voluntary (55%), can be changed (55%), and that Adventists should oppose gay marriage (57%). Fulton and colleagues also found that younger respondents had more positive sentiments toward LGB individuals, and those better acquainted with LGBs reporting much less negative sentiments.

Further evidence to support positive attitudes among younger generations comes from an Adventist press release of a “Landmark Survey” conducted by the General Conference of Seventh-day Adventists. They report that almost half of college students and recent college graduates would accept practicing homosexuals (e.g. sexually active) in good and regular standing within their churches (Garcia, 2013).

These findings indicate that there is a substantial portion of younger Adventists who favor accepting practicing LGB individuals who desire to be members of the Adventist church,

but there are also many who believe that that LGBs can change their orientation with God's help and willpower. These findings suggest that the SDA church is conflicted. Some want LGBs to change their orientation and believe they cannot, while others believe they can change their orientation but do not want to. Most want LGBs to be part of the church, but many still believe they should not be official members. It is obvious that this survey and press release make a compelling case for a fuller understanding of why Adventists attitudes are so diverse.

Up to this point, no behavioral studies have attempted to examine what factors (media exposure, having an LGB friend, etc.) affect Adventist LGB attitudes. Additionally, it should be noted that surveys conducted at only one point in time lack the ability to detect changes in attitudes. This is partly because it is hard to get the same people to do the same survey at a later date. In an article about Fulton and colleagues' survey, originally published on the Adventist Today website (now no longer available), Carol Grady asks the question "How many have found their understanding of homosexuality changing as new information is made known?" (Grady, 2013). She asked this question but she has no way of answering it given the method of her inquiry. Surveys can only answer a narrow spectrum of questions limited to what is asked, how questions are asked, and the fact that questions are asked on only one occasion.

One very accessible way to measure Adventist attitude change is by viewing the documentary film, *Seventh-Gay Adventist*, produced and directed by Daneen Akers and Stephen Eyer (2012). In the film, through a process of self disclosure, two gay couples and one lesbian couple tell their story of growing up Adventist. They now desire to remain in the Adventist church. These couples also know that the church does not officially condone their homosexual, yet monogamous, relationships. In telling their stories this documentary implicitly advocates for

the acceptance and integration of monogamous gay and lesbian couples into the Adventist Church.

This documentary film appeals to both of Allport's avenues of attitude change (*central* and *peripheral*) but tends to lean more heavily toward a *peripheral* argument. I believe the filmmakers are looking to convince viewers to have a more tolerant and unconditional acceptance of lesbian, gay, bisexual, and transgendered (LGBT) individuals who have either assumed their sexual identity (and practice it) or are still questioning. All three couples presented in the movie have claimed their lesbian or gay sexual orientation, are presumably sexually active in monogamous relationships, and are looking for healthy and constructive ways to behave in an Adventist subculture that sometimes warily accepts them.

Little is known about what specifically influences Adventist attitudes towards homosexuality. Religious institutions must understand their congregations' opinions and how those opinions might be influenced or else they will be seen as out of touch. Additionally, churches and other religious institutions should also have a vested interest in understanding how young adults (e.g. Millennials) interact with media, especially when it comes to a divisive issue like homosexuality in the church. The data collected from this study will be very useful for churches or schools in the Adventist system no matter where one stands on the issue.

Present Study

The purpose of this study is to examine how the film, *Seventh-Gay Adventist* (SGA) influences SDA college students' attitudes regarding homosexuality. I will not be studying LGBTs specifically, but rather, Andrews University students' changing attitudes towards LGBTs, particularly with those who accept their sexual orientation, practice it, and would still like to be a

part of the Adventist Church (which is what *Seventh-Gay Adventist* is about). Although I would be very interested in studying subjects' actual *behavior*, my research is limited to the *cognitive* and *affective* components of attitude.

This documentary does precisely this--addresses cognitive and affective components of attitudes toward LGBs. The film explores many issues that both gay and lesbian Adventist couples face in their attempts to reconcile their sexual orientation and their faith. Through their personal accounts and self-disclosures, viewers can receive a new perspective. The film's advocacy can be accepted, rejected or partially integrated into their attitudes towards the issue.

This present randomized, controlled experiment will examine Adventists' attitudes towards homosexuality at Andrews University, a conservative Seventh-day Adventist campus. This study is similar to the studies conducted by Riggle et al. (1996) and Mazur and Emmers-Sommers (2002). The question I would like to answer is this: How much does this documentary change Adventist students' attitudes towards sexual orientation and in what ways?

Methods

Participants & Sampling procedure

Sixty undergraduate students, taken from the Andrews University Behavioral Sciences Research Participation Pool, agreed to participate in the study. Six of the subjects had identification numbers that were not consistent throughout the study so they were excluded from the analysis. Additionally, 7 subjects (all female) were excluded because they had already seen the film. Statistical analysis for the entire study was confined to the 46 subjects who were not excluded. It should also be noted that only 29 of the 46 subjects opted to take the third (online) survey a month later.

Of the 46 subjects remaining, 72% were female and 28% were male. Consisting mainly of freshman (60%) and sophomores (22%), 90% were under the age of 22. The majority of the subjects in this study were Asian (37%), followed by Black/African Americans (20%), Multicultural (15%), White/Euro-Americans (15%), Hispanic/Latinos (6.5%), and West Indian/Caribbeans (6.5%).

Just over 90% indicated that they consider themselves affiliated with the Adventist church and the remaining 9% (all females) said they were either Protestant or Catholic. Just over 65% of subjects said they were either a third, fourth or a fifth generation Adventist. Another 30% said they were either a first or a second generation Adventist. Exactly 50% of the subjects indicated that they had a 'moderate' stance with regards to religious orientation. A little over a third (36%) indicated that they were either 'liberal' or 'very liberal' and 13% said they were conservative. None of the subjects marked 'very conservative' on their survey.

When asked about the degree to which they knew a lesbian or gay individual, there were varied levels of relationship closeness. Just over 50% of subjects said that they were casually or closely acquainted with a lesbian. Just under 25% said they had no acquaintance. For acquaintance with gay men, 60% said they were either casually or closely acquainted and 17% said they had no acquaintance.

Even after excluding cases, the remaining 46 subjects were relatively well divided between experimental (n=20; 43%) and control group (n=26; 57%). Males and females were pretty evenly distributed between the experimental (6 males and 14 females) and control condition (7 males and 19 females).

Measures

Homosexuality Attitude Scale (HAS): The HAS, designed by Kite & Deaux (1986), is used for assessing general attitudes towards homosexuality. The first 21 questions on the survey from the HAS are combined into one score ranging from 21 to 105³ and a score of 63 indicates complete neutrality on the scale. For the purposes of this study, the first 21 questions used from our survey are the exact same questions as the HAS. This scale shows excellent internal consistency (Cronbach alphas $>.92$). The scale also has a good test-retest reliability ($r = .71$). There are no target differences in attitude scores for “gay male,” “lesbian,” and “homosexual.”

Survey questions from Fulton et al. (2013): Selected items from a measure designed by Fulton and colleagues regarding LGB and Adventist issues was also included in this study (questions 22-30).

Procedure

Students registered in Andrews University Behavioral Science Research Participation Pool were solicited in one of two ways. Either I, the student researcher, would briefly attend an introductory level Psychology class (Intro to Psychology, Human Development) to make a brief announcement about the study and hand out flyers, or teachers would hand out flyers at the end of class. This study offered up to two of the four research credits that each student needed to complete as part of a course requirement. Very little was said in the flyer to give major clues as to the nature of the study (See Figure 2 in appendix).

Students were asked to attend an evening viewing midway through the spring semester of 2014. Upon arrival, the students were greeted by Dr. Burnett (the faculty sponsor) and myself at

³ A person scoring a 21 would be highly unsupportive of LGB people and pro-LGB attitudes whereas a person scoring 105 indicates highest levels of support for LGB people and attitudes.

a table in a hallway just outside two classrooms. They were asked to write their names, their personally created 4-digit code, and their initials on an attendance sheet (see Figure 3 in appendix for sample). While students 'signed in,' Dr. Burnett and I reminded the students that their ID # would not be matched with their names in data in the analysis and that after subjects' surveys were entered, the response sheet would be shredded.

After signing in, subjects had to pick a card from a deck. Depending on which color subjects randomly received (red or black), they were assigned to a room. Subjects had no clue as to what was being shown in the two rooms other than suspecting they would be watching a film that looked at attitudes towards sexual orientation and documentary film (which was on the flyer).

Once students filed into their respective classrooms, Dr. Burnett and I proceeded separately to read the informed consent⁴ (see Figure 4 in the appendix). I was in charge of reading the informed consent to the experimental group and Dr. Burnett was in charge of reading the consent to the control group. After the informed consent was read aloud, subjects proceeded to fill out the pre-test survey (see Figure 5).

After all of the pre-test surveys were collected, the films were displayed. Subjects in the experimental room proceeded to watch *Seventh-Gay Adventist*. The control room watched the movie *The Adventist* (2010), a documentary about the Adventist health system and the church's distinctive views on healthy living. The purpose of the control film was to present subjects with a documentary that had Adventist themes (talking about Adventism with Adventists) without

⁴ There were no differences in wording between the informed consent for the control or the experimental group other than the time allotted for the movies.

exposing subjects to any new ideas that might change their attitudes towards homosexuality within that short duration between surveys.

No major disturbances occurred during the film other than the film briefly shutting off due to a timed AV system shutoff. This occurred in both rooms around the same time so it is very unlikely that this affected differences between the control and experimental group.

Directly following the last scene of the movie, subjects were asked to fill out another copy of the exact same survey (post-test) before they left the room. The third survey took place a month later and was conducted online with a two-day window to respond. The majority (67%) of the subjects took the online survey and the rest did not. The subjects that did not answer the third survey were excluded from survey analysis that included the third survey. Although this post-posttest cannot account for all extraneous variables happening within the one-month duration, the intent was to see if the movie had a delayed effect (either positive or negative) on students' attitudes toward LGB individuals.

Analysis

The data was analyzed using SPSS version 22 statistical software. Demographic characteristics and tests for differences were analyzed with the 46 remaining participants who had not seen the movie. Analysis examining three stage changes only analyzed the subjects who completed the online survey a month later ($n = 29$). A Mann-Whitney U test revealed no significant differences in the HAS between experimental and control at the pretest ($U = 233.5, z = -.31, p = .76$), posttest ($U = 237, z = -.01, p = .99$), and post-posttest ($U = 94, z = -.59, p = .55$). There was also no difference between gender pretest ($U = 152, z = -1.4, p = .16$), posttest ($U = 172.5, z = -.75, p = .46$), and post-posttest ($U = 67, z = -.96, p = .34$).

At each point (pretest, posttest, and post-posttest) the subjects' individual scores were tested for normal distribution. The Kolmogorov-Smirnov (K-S) test for normality showed that all three parts were normally distributed. However, when the file was split into experimental and control groups the distribution was not normal for the pretest (See Figure 6).

A between-within subjects analysis of variance (ANOVA) looked for any interactions or differences between the experimental group and control group at pretest and posttest (See Figure 7). Interactions involving post-posttest were not included due to small sample size.

Additionally, multiple paired sample ("repeated measures") *t*-tests were used to compare differences in HAS scores for experimental and control groups at each of the three points in the study (See Figure 8). Non-parametric equivalent difference tests (Wilcoxon signed-rank test and Friedman's) were also run to confirm findings (See Figure 9 & 10).

Individual paired samples *t*-tests were also used to measure individual question change from pretest to posttest on the survey. This would indicate if subjects' attitudes moved regarding a particular issue before and after watching the movie.

Results

Pretest Group

The attitude score (HAS) for the pretest survey had a mean score of 69.87 ($SD = 12.8$). This means the distribution of the attitude scores are clustered above the neutral score of the HAS. Even before any treatment was given, the pretest scores for both groups indicate a slight favorability towards LGB people.

When the file was split into the experimental and control groups, the experimental group pretest were not normally distributed according to the K-S test (Pallant, 2010, p. 63). However,

after watching the film, the experimental group was normally distributed (See Figure 6). This suggests that subject scores may have moved into a more normal distribution (possibly due to a mainstreaming effect) after watching the film. This also means one should not run parametric tests for differences between and within groups (Pallant, 2010, p. 63).

Initial attitudes were also examined by looking at particular items. When asked about what they think God and the Bible have to say, subjects held more traditionally conservative views. The majority (73%) believed God views homosexuality as a sin, while another 20% remained neutral and only 3 subjects disagreed. Most (87%) believed that the Bible condemns homosexuality as a sin; only one subject believed that the Bible does not condemn homosexuality.

Answers related to the Adventist Church were more diverse. Just under 50% believed that Adventists should politically oppose the legalization of gay marriage, while 32% remained neutral. Only 8 subjects (13%) believe that Adventists should support civil unions between homosexuals but not marriage, while 43% remained neutral and 43% disagreed. One third said that they would insist that a lesbian or gay couple quit living together before they were allowed to be baptized. Another third remained neutral and another third did not think that was necessary. Most (87%) said they would welcome a gay man into their church. Only two subjects said they would not welcome them. The same pattern held true with lesbian women.

Subjects were also relatively divided when it came to whether or not homosexuals can change. One in three said homosexuality is a result of factors beyond voluntary control, another third remained neutral, and the other third disagreed. Just under half (44%) believed that with proper interventions people who identify as homosexual can be changed to heterosexuals.

Another 40% remained neutral, with only 16% believing they cannot change. Only four people believed homosexuals should be forced into treatment.

When asked about everyday things (not related to religious matters), answers were far more accepting. Just under three quarters of subjects would not mind having a homosexual friend. Only four subjects said they would mind. Only one person of 46 said that homosexuality is a mental illness. One third (30%) remained neutral and everyone else believed or strongly believed it is not a mental illness. Only four subjects (under 10%) believed that homosexuals were more likely to commit deviant sexual acts, such as child molestation, rape, and voyeurism, than heterosexuals; the rest either remained neutral or disagreed.

LGB rights as a social issue were divided. Only one person saw the gay movement in a positive light. Just under 45% remained neutral and another 50% or so did not see it in a positive light. Just over half (56%) believed that increasing acceptance of homosexuality in our society is aiding in the deterioration of morals.

Pretest Group Difference Analysis

A Wilcoxon Signed Rank Test revealed no statistical differences between attitudes in pretest and posttest ($z = -.56$, $p = .576$) for those who watched *Seventh-Gay Adventist*. A Mann-Whitney U test revealed no statistical differences between the scores of those who watched *Seventh-Gay Adventist* ($Md = 67$, $n = 19$) and those who watched *The Adventist* ($Md = 73$, $n = 26$), $U = 227$, $z = -.012$, $p = .991$. In other words, watching *Seventh-Gay Adventist* did not alter subjects' overall attitudes towards homosexuality on the HAS. Another Wilcoxon Signed Rank Test indicated that there were also no significant differences in HAS scores a month later ($z =$

-.127, $p=.899$). Overall the HAS scale did not show that the movie had any significant effects on subjects' attitudes.

There was only one item that showed a significant difference between pretest and posttest scores (one of the survey questions from Fulton et al.): "*I believe that with proper interventions people who identify as homosexual can be changed to heterosexuals.*" A Wilcoxon Signed Rank Test revealed a statistically significant change in peoples' attitudes ($z = -2.22, p < .03$). This score indicates that more people, after watching the movie, believed it was harder for a homosexual to change into a heterosexual. This had an effect size of $d = .33$ which according to Cohen (1988) is considered to be a medium effect.

Discussion

The purpose of this study was to examine how the film, *Seventh-Gay Adventist* (SGA) influences SDA college students' attitudes regarding homosexuality. Based on the findings of this small study, it appears that *Seventh-Gay Adventist* did not change the subjects' attitudes overall. In fact, there was only one item on the entire survey that showed any attitude shift. Although this change may have some modest implications, it would be inappropriate to assume that this movie changed subjects' attitudes about homosexuality in any significant ways. At least with this audience it appears that the movie had no immediate effect. It also appears that the movie did not have a significant effect one month after the film had been viewed. These findings are in opposition with previous research that showed significant changes in the attitudes of those who watched documentary films about different issues (Riggle et al., 1996; Cooley and Burkholder, 2011; Mazur & Emmers-Sommers, 2002).

There are a number of possible explanations as to why this movie had no significant effect on subjects' attitudes. For one, it may be difficult to overcome previous prolonged media exposure in such a short time. This is a Millennial sample and more than likely they have already experienced repeated and varied exposures to LGB individuals in the media through film, television, and internet sources that could have solidified their attitudes towards LGB issues and individuals. This lack of movement could signal a ceiling effect that would require diverse and repeated exposure before a significant attitude shift occurs.

These findings suggest that personal response to LGB people remains relatively favorable, but theological shifts may be harder to achieve through a brief exposure. As stated earlier, the SDA church officially takes a very strong stance against practicing homosexuals. Moving people in a certain direction may be particularly hard when dealing with the intersection between a person's religious views and their attitudes towards homosexuality. Family members, fellow church members, and religious leaders may have a much stronger voice in the minds of subjects than a one time documentary exposure. This may be particularly true on the Andrews University campus, where LGB issues have been a 'hot topic' in the form of various classroom discussions, policy statements, and sermons. Most of these religious discussions have reinforced the conservative Biblical position on homosexuality, perhaps leading students to form strong theological beliefs that are difficult to shift through one movie exposure of an alternative viewpoint.

This dissonance between personal relationships with LGB individuals and theological doctrine and beliefs is important. While many subjects viewed LGB individuals favorably on a

personal level and believed in accepting them in their churches, they were less inclined to believe that LGB behaviors lined up with correct theological understanding.

It would appear that with the Millennials surveyed in this sample align most strongly with white evangelical Protestant Christians in larger national surveys. This sample, compared to the larger Millennial sample, appears to be very socially conservative (for example, 50% believed Adventists should politically oppose same-sex marriage).

The one item that showed statistically significant movement toward greater acceptance of LGB individuals - *"I believe that with proper interventions people who identify as homosexual can be changed to heterosexuals"* - is of possible interest because a substantial amount of time was devoted to this issue in the film. All three of the main Adventist characters described their painful and intense attempts to try to change their sexual orientation through prayer, Bible study, therapy, and group retreats, without any change in their sexual desires or orientation. They also talked about having come to a partial peace with their sexual orientation, resulting in attempts to connect or reconnect with their spiritual roots. It is perhaps possible that these powerful stories influenced viewers to change their belief that the orientation of LGB individuals can be changed through therapy or other interventions.

Troiden's fourth and final stage of Homosexual Identity Formation (1988) is *Commitment*. This means the person has not only accepted their same-sex attraction but also have integrated their sexual and emotional selves and they are committed to a same-sex love relationship. Part of this fourth stage is the process of disclosure to heterosexuals. This is precisely what this documentary does. It uses the medium of film to disclose personal aspects of their lives and how they would like to be viewed in by members of the Adventist church.

Finally, these findings are, at some level, also consistent with Calzo and Ward (2009), who suggest that media exposure may cause a mainstreaming effect. The data that started off not normally distributed then moved to a more normal distribution after the film exposure. It should be noted that this does not mean that attitudes necessarily changed significantly in a particular direction, it just means that the data moved closer on both sides of the mean. Said differently, those with extreme views moved more closely toward the majority responses of the group as a whole. This may mean that the film helped those with more extreme views to become a bit more normative in terms of their responses.

Limitations

There are many ways in which one could make this study more comprehensive. For one, a larger sample would make analysis between groups much easier (by ethnicity or political affiliation for example). It would also be interesting to see how Adventists were affected depending on which region of the world you were raised. This study neglected to ask where subjects were raised (inside or outside the US). Would a Californian Adventist be affected the same way as a Jamaican Adventist, New York Adventist, or a Brazilian Adventist? It is hard to say but it could be argued that Seventh-Day Adventist targets a Western (specifically American) audience.

Another dimension that was touched on quite frequently in this study was generational differences. How would a Baby Boomer or a member of the Silent Generation be affected by this movie? It is difficult to know if it would have a similar effect as the present study. It would also be interesting to add another condition; maybe a one on one conversation with a LGBT person or

small public Q & A. These are just a few of the limitations of this study and more research in the area surrounding LGBT attitudes is strongly advised.

Conclusions

Regardless of where one stands on this issue, learning more about Adventist attitudes is important for everyone. It is important to be informed that oftentimes the officially held position of the church is not always the opinion of the congregation. Understanding the diversity and complexity of individuals gives a more informed picture of where a particular organization stands. Daniel Cox, the PRRI research director says, “Seven-in-ten Millennials say that churches are alienating younger Americans by being too judgmental about gay and lesbian issues” (Cox, 2013). This statement should be taken into consideration as the church moves forward.

References

- Allport, G. W. 1935. Attitudes. In *Handbook of social psychology*. Edited by C. Murchison, 798–844. Worcester, MA: Clark Univ. Press.
- Calzo, J. P., & Ward, L. M. (2009). Media exposure and viewers' attitudes toward homosexuality: evidence for mainstreaming or resonance?. *Journal of Broadcasting & Electronic Media*, 53(2), 280-299.
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Academic press.
- Cooley, J. J., & Burkholder, G. J. (2011). Using video and contact to change attitudes toward gay men and lesbians. *Journal of Social, Behavioral, and Health Sciences*, 5(1), 83-90.
- Crooks, R., & Baur, K. (2014). *Our Sexuality* (12th ed., p. 704). Independence, KY: Cengage Learning.
- Fulton, A., Hagood, D., & Grady, C. (2013, April). *Adventists and LGBs: Conservative Christian Attitudes and Beliefs about Homosexuality*. Paper presented at the Western Psychological Association, Reno, NV.
- Finlay, B. & Walther, C. S. (2003). The relation of religious affiliation, service attendance, and other factors to homophobic attitudes among university students. *Review of Religious Research*, 44(4), 370-393.
- Garcia, E. (2012, October 17). Church's view on gays, lesbians adjusted to emphasize 'compassion'. Retrieved from:
<http://news.adventist.org/en/all-news/news/go/2012-10-17/churchs-view-on-gays-lesbians-adjusted-to-emphasize-compassion/>

- Garcia, E. (2013, October 17). Landmark survey reveals in-depth beliefs, perceptions of Adventist members. Retrieved from:
<http://news.adventist.org/all-news/news/go/2013-10-17/landmark-survey-reveals-in-depth-beliefs-perceptions-of-adventist-members/>
- Grady, C. (2013). Survey Explores Attitudes Toward Homosexuality Among Adventists. Retrieved January 30, 2014, from
<http://www.atoday.org/article/1862/news/2013/may/survey-explores-attitudes-toward-homosexuality-among-adventists>)
- Huskinson, T. L., & Haddock, G. (2006). Individual differences in attitude structure and the accessibility of the affective and cognitive components of attitude. *Social Cognition*, 24(4), 453-468.
- Jomini Stroud, N. (2007). Media effects, selective exposure, and Fahrenheit 9/11. *Political Communication*, 24(4), 415-432.
- Jones, R., Cox, D., & Navarro-Rivera, J. (2014). A Shifting Landscape: A Decade of Change in American Attitudes about Same-sex Marriage and LGBT Issues. *Public Religion Research Institute*, 60-60.
- Johnson, M. E., Brems, C., & Alford-Keating, P. (1997). Personality correlates of homophobia. *Journal of homosexuality*, 34(1), 57-69.
- Kite, M.E., & Deaux, K. (1986). Attitudes toward homosexuality: Assessment and behavioral consequences. *Basic and Applied Social Psychology*, 7, 137-162.
- Maio, G., Olson, J., Bernard, M., & Luke, M. (2006). Ideologies, values, attitudes, and behavior. In *Handbook of social psychology* (pp. 283-308). Springer US.

- Mazur, M. A., & Emmers-Sommer, T. M. (2002). The effect of movie portrayals on audience attitudes about nontraditional families and sexual orientation. *Journal of homosexuality*, 44(1), 157.
- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS, 4th edition* (4th ed.). Maidenhead, Berkshire: McGraw Hill.
- Penn, D. L., Chamberlin, C., & Mueser, K. T. (2003). Effects of a documentary film about schizophrenia on psychiatric stigma. *Schizophrenia bulletin*, 29(2), 383.
- Pew Research Center (2013, March 20). Growing Support for Gay Marriage: Changed Minds and Changing Demographics. Retrieved March 29, 2015, from <http://www.people-press.org/2013/03/20/growing-support-for-gay-marriage-changed-minds-and-changing-demographics/>
- Plotnik, R., & Kouyoumdjian, H. (2010). *Introduction to psychology*. Cengage Learning.
- Public Religion Research Institute (2012, August 29). New poll: Millennial Generation Transforming Landscape on Gay and Lesbian Issues. Retrieved March 29, 2015, from <http://publicreligion.org/newsroom/2011/08/new-poll-millennial-generation-transforming-landscape-on-gay-and-lesbian-issues/#.VRg7zBz3-ix>
- Riggle, E. D., Ellis, A. L., & Crawford, A. M. (1996). The impact of "media contact" on attitudes toward gay men. *Journal of homosexuality*, 31(3), 55-69.
- Seventh-day Adventist Church (2012, October 17). Official Statement on Homosexuality. Retrieved from <http://www.adventist.org/information/official-statements/statements/article/go/0/homosexuality/>

Akers, D. (Producer/Director), & Eyer S. (Producer/Director). (2013). *Seventh-Gay Adventists*

[Motion picture on DVD]. United States: Watchfire Films.

Doblmeier, M. (Director). (2010). *The Adventist* [Motion picture on DVD]. United States:

Journey Films.

Appendix

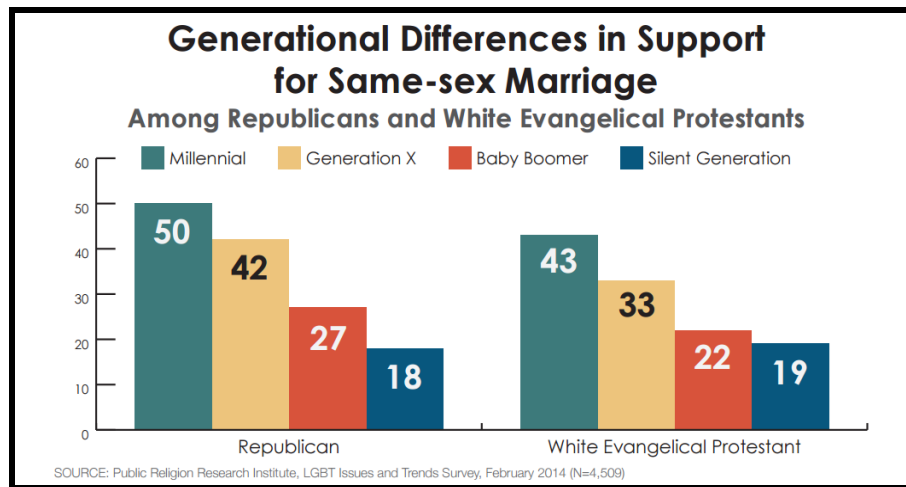


Figure 1. PRRI Generational Differences Among Conservative Groups

Watch a film for research credit!

If you haven't signed up for the BHSC research pool, you should do it soon. Lucky for you, I have an opportunity! There is going to be a documentary film screening this **TUESDAY (FEBRUARY 4) at 7:00 PM for 2 credits.**

I'm guessing almost all of you have not done that yet, so here's how to do it- either check your email from Dr. Bailey about the Behavioral Science Research Pool or just type in **andrews.sona-systems.com**

I am interested in measuring how your attitude may change after you are done watching it. Make sure you sign up as soon as possible because I won't let you in unless I know that you have signed up for sure.

The study is entitled: **Attitudes Towards Sexual Orientation and Documentary Film**

Figure 2. Research Flyer

Attendance Sheet			
<i>This sheet is for the purposes of assigning credit in the system. I will shred the document before I do any analysis</i>			
Name	4-Digit Code	February 4 (initial here)	March 4/5

Figure 3. Attendance Sheet

Informed Consent
Attitudes towards Sexual Orientation
<p>The study you are about to participate in takes a look at how movies affect attitudes towards sexual orientation. Your participation in this study is strictly voluntary and will involve completing a short questionnaire, watching a film, completing another short questionnaire right after the film, and then completing a final questionnaire one month after the screening. The film is one hour long and each questionnaire should take no longer than 15 minutes to fill out.</p> <p>There is no risk of physical harm in participating in this study. Be warned that this film contains brief non-sexual exchanges of affection by two gay individuals that may make some viewers uneasy. If you experience any degree of spiritual or mental discomfort, please contact the Counseling and Testing Center at (269) 471-3470.</p> <p>Your responses will be kept confidential. As you complete the questionnaire, you are not to write your name on them. Furthermore, you will not be identified by name on any of the questionnaires: only a special 4-digit code (that you must choose) will be used. The responses that you provide will be stored in a secure location.</p> <p>The responses that you provide will be combined with those of other participants in the study for analysis in order to further our understanding of attitudes towards sexual orientation. If you decide that you no longer wish to participate in this study after starting please return all uncompleted documents to the provided survey collection folder located at the front of the classroom.</p> <p>If you have any questions about this study please contact with Michael VanderWaal (michaely@andrews.edu, (269) 357-5988) or Dr. Harvey Burnett (harveyb@andrews.edu, (269)471-6881) of the Andrews University Behavioral Sciences Department.</p> <p>If you are willing to participate in this study, please fill out the questionnaire.</p> <p>Thank you for your assistance!</p>

Figure 4: Informed Consent example (Control)

I have read the Informed Consent Letter and recognize that by completing this survey, I am giving my informed consent.
This survey will take 15 minutes to complete
Please only circle one for each of the 8 demographic questions

4-DIGIT Code _____

1. What is your current class standing?

Freshman Sophomore Junior Senior Graduate student

2. What is your gender?

Male Female

3. How old are you?

4. What is your ethnic background? (Circle all that Apply)

Asian or Pacific Island Black/African American Hispanic/Latino
 White/Euro-American West Indian/Caribbean Multi-cultural
 Other _____

5. How would you identify yourself in regard to religious orientation?

Fundamentalist Conservative Moderate Liberal Very Liberal

6. What is your Church Affiliation?

Seventh-day Adventist Protestant (e.g., Lutheran, Episcopal, Baptist, Church of Christ etc.)
 Catholic Muslim
 Buddhist No affiliation
 Other affiliation _____

7. How long have you been a member of the Seventh-day Adventist Church?

_____ years

1

8. I am a...(Circle One)

1st generation Adventist (How many years? _____) 2nd Generation Adventist
 3rd generation Adventist 4th, or 5th generation Adventist

9. Are you acquainted with a woman that you know is lesbian?

Closely acquainted Casually Acquainted Know of but not acquainted No acquaintance

10. Are you acquainted with a man that you know is gay?

Closely acquainted Casually Acquainted Know of but not acquainted No acquaintance

11. Have you Seen the Movie, Seventh-Gay Adventist?

Yes No

2

Sexual Orientation Attitude Survey

PLEASE PUT A 4-DIGIT CODE ON THIS PAGE THAT YOU WILL REMEMBER FOR FUTURE SURVEYS

My suggestion to you is to put the last 4 digits of your cellphone number.

4-DIGIT CODE _____

Please indicate your level of agreement with the items below using the following scale:

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

1. ___ I would not mind having a homosexual friend.
2. ___ Finding out that an artist was gay would have no effect on my appreciation of his/her work.
3. ___ I won't associate with known homosexuals if I can help it.
4. ___ I would look for a new place to live if I found out my roommate was gay.
5. ___ Homosexuality is a mental illness.
6. ___ I would not be afraid for my child to have a homosexual teacher.
7. ___ Gays dislike members of the opposite sex.
8. ___ I do not really find the thought of homosexual acts disgusting.
9. ___ Homosexuals are more likely to commit deviant sexual acts, such as child molestation, rape, and voyeurism (Peeping Toms), than are heterosexuals.
10. ___ Homosexuals should be kept separate from the rest of society (i.e., separate housing, restricted employment).
11. ___ Two individual of the same sex holding hands or displaying affection in public is revolting.
12. ___ The love between two males or two females is quite different from the love between two persons of the opposite sex.
13. ___ I see the gay movement as a positive thing.
14. ___ Homosexuality, as far as I'm concerned, is not sinful.
15. ___ I would not mind being employed by a homosexual.
16. ___ Homosexuals should be forced to have psychological treatment.
17. ___ The increasing acceptance of homosexuality in our society is aiding in the deterioration of morals.
18. ___ I would not decline membership in an organization just because it had homosexual members.
19. ___ I would vote for a homosexual in an election for public office.
20. ___ If I knew someone were gay, I would still go ahead and form a friendship with that individual.
21. ___ If I were a parent, I could accept my son or daughter being gay.

3

Please indicate your level of agreement with the items below using the following scale:

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

22. ___ I understand homosexuality to be a result of factors that are beyond voluntary control.
23. ___ I believe that with proper interventions people who identify as homosexual can be changed to heterosexuals.
24. ___ I would welcome a gay man who came to my church.
25. ___ If a gay or lesbian couple who lived together romantically attended evangelistic meetings in my church and asked to be baptized, I would insist that they quit living together before they were allowed to be baptized.
26. ___ I believe the Bible condemns homosexuality as a sin.
27. ___ I believe that Adventists should politically oppose the legalization of gay marriage.
28. ___ I believe that Adventists should support civil unions between homosexuals but not marriage.
29. ___ I would welcome a lesbian woman who came to my church.
30. ___ I believe that God views homosexuality as a sin.

4

Figure 5: Full paper survey

Tests of Normality							
Exp/Control Group		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Experimental	PartOneHAS	.200	19	.045	.932	19	.189
	PartTwoHAS	.168	19	.161	.942	19	.283
	PartThreeHAS	.192	12	.200 [*]	.953	12	.681
Control	PartOneHAS	.169	26	.054	.939	26	.129
	PartTwoHAS	.171	25	.057	.909	25	.028
	PartThreeHAS	.156	18	.200 [*]	.933	18	.218

*. This is a lower bound of the true significance.

Figure 6. Part one experimental group moves from non-normal distribution ($p < .05$) to a normal distribution in part two ($p > .05$). This indicates that the movie may have had a mainstreaming effect.

Profile Plots

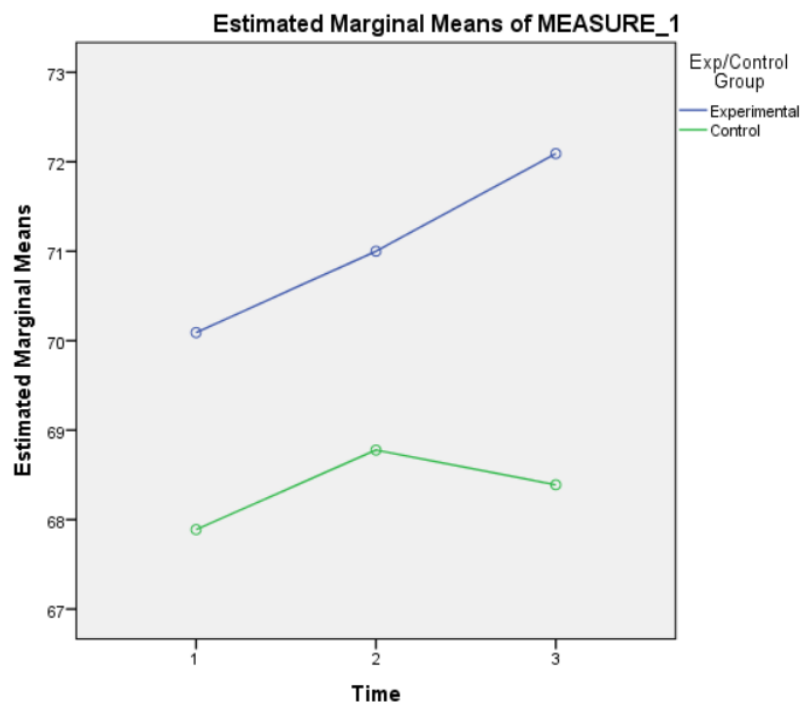


Figure 7: There are no interactions between experimental and control group.

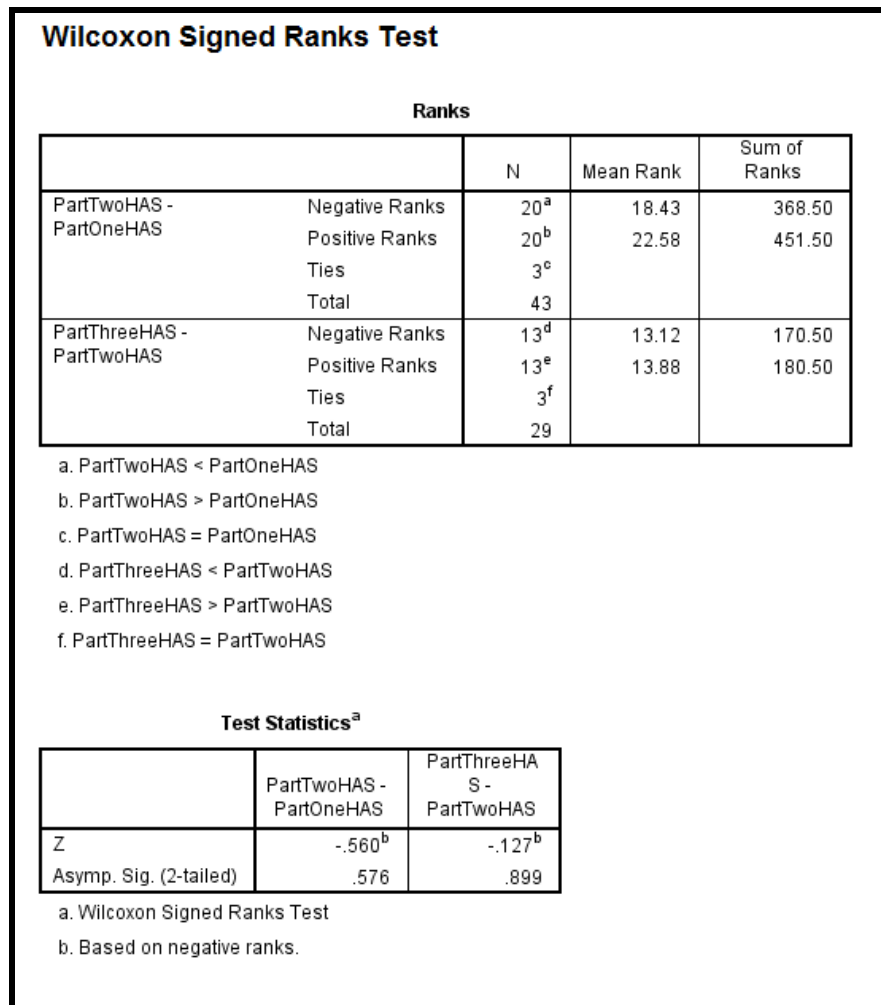


Figure 8: Non-parametric difference test.